

INTERNATIONAL EXECUTIVE REVIEW



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Bulletin #6

EDU: GEOINTEL, RGO, GPS

* World Geodetic System 1984¹ (WGS 84)

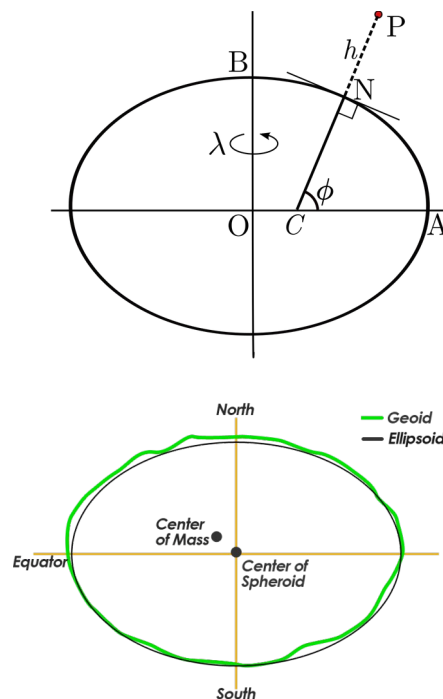
The Global Positioning System (GPS) uses the World Geodetic System 1984 (WGS 84) to determine the location of a point near the surface of Earth.

WGS 84 defining parameters

Parameter	Notation	Value
Semi-major axis	a	6 378 137.0 m
Reciprocal of flattening	$\frac{1}{f}$	298.257 223 563

WGS 84 derived geometric constants

Constant	Notation	Value
Semi-minor axis	b	6 356 752.3142 m
First eccentricity squared	e^2	$6.694\,379\,990\,14 \times 10^{-3}$
Second eccentricity squared	e'^2	$6.739\,496\,742\,28 \times 10^{-3}$



* The National Geospatial-Intelligence Agency² (NGA)

is a combat support agency within the United States Department of Defense whose primary mission is collecting, analyzing, and distributing geospatial intelligence (GEOINT) in support of national security. Initially known as the **National Imagery and Mapping Agency** (NIMA) from 1996 to 2003, it is a member of the United States Intelligence Community.



* The Royal Observatory³, Greenwich

(ROG; known as the **Old Royal Observatory** from 1957 to 1998, when the working **Royal Greenwich Observatory**, RGO, temporarily moved south from Greenwich to Herstmonceux) is an observatory situated on a hill in Greenwich Park in south east London, overlooking

1 https://en.wikipedia.org/wiki/Geodetic_datum

2 https://en.wikipedia.org/wiki/National_Geospatial-Intelligence_Agency

3 https://en.wikipedia.org/wiki/Royal_Observatory,_Greenwich

the [River Thames](#) to the north. It played a major role in the history of [astronomy](#) and [navigation](#), and because the [Prime Meridian](#) passed through it, it gave its name to [Greenwich Mean Time](#), the precursor to today's [Coordinated Universal Time](#) (UTC). The ROG has the [IAU](#) observatory code of 000, the first in the list. ROG, the [National Maritime Museum](#), the [Queen's House](#) and the clipper ship [Cutty Sark](#) are collectively designated [Royal Museums Greenwich](#). The observatory was commissioned in 1675 by [King Charles II](#), with the [foundation stone](#) being laid on **10 August**.

* Maritime terms⁴:

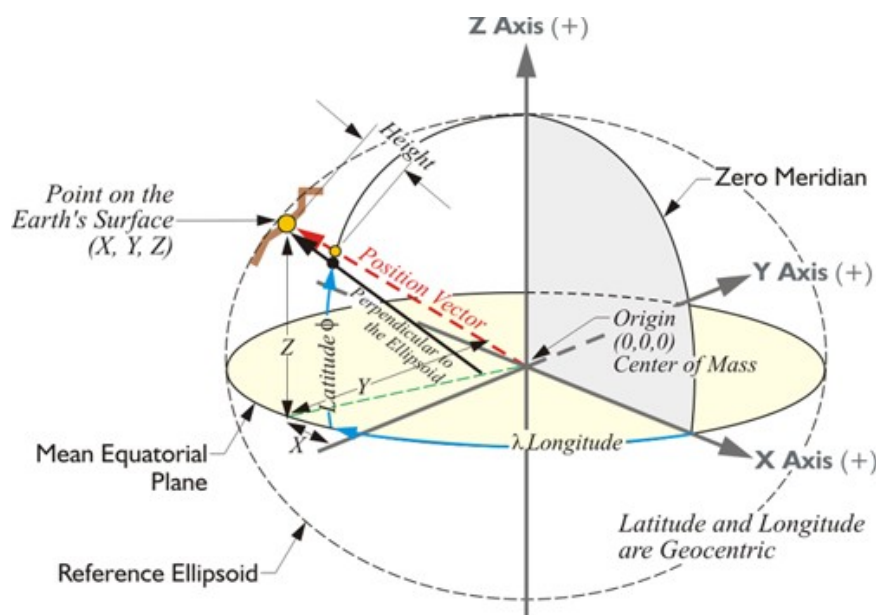
A.G.D.:	Australian geodetic datum.
A.G.D.66:	Australian Geodetic Datum 1966 - the datum used by the Australian Hydrographical Office on Australian Charts which is a different datum used by the GPS. See also 'WGS84'
Age of the moon:	The interval since the last new moon.
Age of the tide:	The interval since the last full/new moon and the next spring tide.
Agonic line:	A line joining points with no magnetic variation.
Aground:	Touching the sea bottom.
Agulhas Current:	A warm Indian Ocean current running southward along the East African Coastline.
A.G.W.:	All going well.
A.H.D.:	Australian Height Datum adopted by the National Mapping Council for vertical control for mapping (mean sea level 1966-68).
Ahead:	Towards the vessel's bow.
A-hoy:	Used to attract the attention of another vessel.
A.H.L.:	Australian hold ladders.
A.H.O.:	Australian Hydrographical Office.
A-hull:	When a vessel lies perpendicular to the wave fronts. A method heaving to.
A.I.O.:	Admiralty information overlay.
Air:	A mixture of mainly nitrogen, with oxygen and carbon dioxide, constituting the atmosphere with traces of inert gasses.

4 <http://www.splashmaritime.com.au/Marops/Dictionary.pdf>

* Global positioning system (gps⁵)

is een wereldwijd [satellietplaatsbepalingssysteem](#) dat vanaf 1967 werd ontwikkeld voor gebruik door de strijdkrachten van de [Verenigde Staten](#).

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5 <https://www.e-education.psu.edu/geog862/node/1405>